JPEO-CBD

PM-FPS Product Manager - Force Protection Systems

Organization

The US Army Product Manager, Force Protection Systems (PM-FPS), is the Army Materiel Developer for Force Protection Systems. PM-FPS is a product management organization under the Joint Program Executive Office, Chemical and Biological Defense (JPEO-CBD).

Mission

Provide cost-effective, state-of-the-art, and logistically supportable physical security and force protection systems to installations and tactical forces deployed worldwide.

Program Management

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Additional Information

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LKMD

Lighting Kit, Motion Detector, AN/GAR-2( )

Tactical Force Protection Technology Enhancement

The LKMD will be a simple, compact, modular, sensor-based early warning system providing programmable responses of illumination and sound, resulting in increased operational reaction time for individuals, teams, squads, or platoons. The LKMD may be used as a tactical stand-alone system or as a supplemental device for use with other security systems or missions.

Individual Soldier Deployment of an LKMD Motion Sensor Module

The LKMD will provide early detection and warning in order to enhance force effectiveness and increase situational awareness during all types of combat operations or missions ranging from small scale contingencies and military operations in urban terrain (MOUT) up to high intensity combat. In all scenarios or environments, the LKMD will provide the individual, team, or unit leader the increased ability to monitor more terrain, for a longer period of time, with fewer personnel resources. Using the system as a part of an integrated, large, in-depth, layered situational awareness concept will further enhance force protection.

Early Warning & Illumination

LKMD Operational Overview

Tactical forces require supplemental warning devices with programmable notification capabilities in support of the Battlefield Operating System. The deployment scenarios include two major security missions, integrated perimeter (emplaced) security and temporary security augmentation.

MOUT Operations

Perimeter Security

Mobility Function Enhancement

The LKMD will facilitate movement on routes (with secure, manned traffic control points and check points) and during the preparation and emplacement of constructed obstacles.

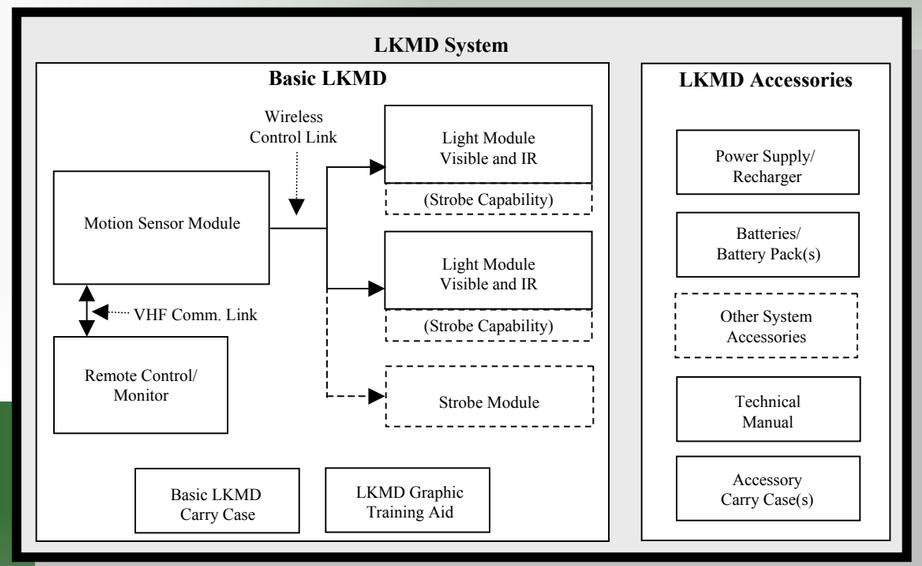
Survivability Function Enhancement

The LKMD will enhance the protection of individuals and systems from combat area hazards (with prepared and protected positions), the conduct of deception in support of tactical operations (such as deployment at dummy positions), OPSEC (physical security), and security for tactical formations within perimeters; provide early warning of incursions; and augment law and order operations (such as security of temporary and permanent facilities, to include protection of personnel and facilities from terrorist activities) and the conduct of internment and resettlement (for improving the security of facilities for enemy prisoners of war, civilian internees, US military prisoners, high-risk detainees, and dislocated civilians).

Tactical Deployment

LKMD System Configuration

The LKMD will be a modular system that includes the following seven hardware items: (1) motion sensor module (MSM), (2) light modules (LM), (3) remote control/monitor (RCM), (4) power supply/recharger, (5) spare batteries/battery pack(s), (6) accessories, and (7) carrying cases.



LKMD Functional Block Diagram

Characteristics/Performance

- Motion detection activation
- Detection range – 24.4m or greater
- Visible (continuous/strobe) and infrared illumination
- Illumination range – 30.5m or greater
- Audible alarm range – 200m
- Wireless LMs – 5m or greater from MSM
- MSM deployed 1km or greater from RCM
- Modular design
- Basic system - no larger than standard one quart plastic canteen
- Lightweight - no more than 1.8kg
- Emplacement by 1 person within 3 minutes
- Recovery by 1 person within 3 minutes
- Deployed individually or in groups of up to 16 systems
- Sufficient power for 5 days of continuous operation

Special Features

- Reuseable portable sensor
- Remote control transceiver
- Remotely programmable responses
- Waterproof
- Anti-tamper capability
- Carrying case with accessories